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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

KT-P-025US

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on August 28, 2006

Signature

Typed or printed

name Carol M. Thomas

Application Number

10/622,882

Filed

July 18, 2003

First Named Inventor

Evan E. Koslow

Art Unit

1723

Examiner

Krishan S. Menon

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐

applicant/inventor.

☐

assignee of record of the entire interest.

See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.
(Form PTO/SB/96)

☒

attorney or agent of record.

Registration number 44,638☐

attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 _____

Signature

Robert Curcio

Typed or printed name

(203) 787-0595

Telephone number

August 28, 2006

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☐

*Total of _____ forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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DOCKET: KT-P-025US

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

INVENTOR: Evan E. Koslow) EXAMINER: Krishnan S. Menon
SERIAL NO.: 10/622,882) ART UNIT: 1723
FILING DATE: July 18, 2003) DATE: August 28, 2006
FOR: CARBON OR)
ACTIVATED)
CARBON)
NANOFIBERS)

REASONS FOR PRE-APPEAL REQUEST FOR REVIEW

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CERTIFICATE OF MAILING

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Name: Carol M. Thomas Date: August 28, 2006

Signature: *Carol M. Thomas*

Dear Sir:

Applicants are submitting these remarks to accompany their Notice of Appeal and Pre-Appeal Brief Request for Review.

Claims 8, 9, 20, 21, 85-89, 92, 101-105 and 108 are pending in the present application. In the Advisory Action dated July 11, 2006, claims 93-97 and 100 are indicated as being rejected, however, these claims have been canceled.

Double Patenting Rejection

Claims 8, 16, 20, 93-97 and 100 stand provisionally rejected under the doctrine of non-statutory obviousness-type double patenting over claims 5, 6, 7, 11, 20, 41 and 43 of Copending application No. 10/640,889 and claims 1-25 of Copending application No. 10/666,878. Claims 8 and 16 also stand rejected under non-statutory obviousness-type double patenting over claim 9 of U.S. Pat. No. 6,872,311. Claims 16,

93-97 and 100 have been canceled. Applicants will submit a terminal disclaimer for pending claims 8 and 20 upon indication of allowable subject matter.

Omission of Essential Elements Needed for a Prima Facie 35 USC § 103 Rejection

Pending claims 8, 9, 21, 85-89, 101-105 and 108 stand rejected under 35 USC§ 103(a) as being unpatentable over Giglia (US 4,929,502) in view of Arons et al. (US4,217,386) and Sawan et al. (US5,681,468). It is Applicant's understanding that claims 20 and 92 have not been rejected under 35 USC§ 103(a).

Independent claim 8 is directed to a sheet comprising carbonized fibrillated lyocell fibers and a microbiological interception enhancing agent on a portion of selected ones of the carbonized fibrillated lyocell fibers. The carbonized fibrillated lyocell fibers have a Canadian Standard Freeness of less than about 100 and a fiber diameter of less than or equal to about 400nm. The sheet has been carbonized at a temperature of less than about 600°C. Claim 9 clarifies that the sheet may be heated to form an activated carbon sheet having a BET surface area of greater than about 800 m²/g, while claim 20 is directed to a filter medium comprising the sheet of claim 8.

Independent claim 21 is directed to a sheet comprising activated, carbonized fibrillated lyocell fibers and a microbiological interception enhancing agent on a portion of selected ones of the fibrillated lyocell fibers. The fibrillated lyocell fibers having a BET surface area of greater than about 800m²/g, wherein prior to carbonization and activation, the fibrillated fibers have a Canadian Standard Freeness of less than about 100 or a fiber diameter of less than or equal to about 400nm and wherein activation occurs in less than or equal to about 30 minutes at a temperature greater than about 875°C in an oxidizing atmosphere.

Giglia teaches having carbon fibers in the sheet; however, as recognized by the Examiner, Giglia does not teach or suggest a microbial interception enhancing agent on selected fibers. To overcome this deficiency the Examiner cites Sawan, which only discloses a liquid dispenser having a filter with a surface and a plurality of its pores coated with a metallic material that is bacteriostatic or bacteriocidal of a metal or metal oxide or metal salt. (Abstract, Summary of the Invention section.) Sawan does not teach a microbiological interception enhancing agent on a portion of selected carbonized fibrillated lyocell fibers, as claimed in claims 8 and 21, nor does it even contemplate or suggest that a microbiological interception enhancing agent can reside on portions of carbonized fibrillated fibers. With respect to claim 9, Arons is cited for teaching carbonizing a sheet to obtain activated carbon in the sheet, and use of rayon as the precursor fabric. Arons also does not contemplate or suggest that a microbiological interception enhancing agent can reside on portions of carbonized fibrillated fibers.

Applicant submits that the Examiner has not made a prima facie case of obviousness over the cited references of Giglia in view of Arons and Sawan since none of these references, alone or in combination, disclose, contemplate or suggest a microbiological interception enhancing agent residing on a portion of selected carbonized fibrillated fibers as is currently claimed. It is only applicant's disclosure that teaches a microbiological interception enhancing agent on a portion of selected carbonized fibrillated fibers, which of course, is improper as a hindsight reconstruction of applicant's invention.

Further, in the above Advisory Action the Examiner states that having the biological interception agent on a portion of selected carbonized fibrillated fibers is also not a patentable limitation stating that "a portion can include the whole" such that

“such limitations do not further limit the claims.” Applicant disagrees since a portion is part of a whole, and as such, cannot include the whole. Applicant’s position is supported by several electronically available definitions of the terms “portion” and “whole”. In fact, these definitions support that the term “whole” is the antonym of the term “portion”. (E.g., Merriam Webster Dictionary, www.m-w.com/dictionary/portion, portion = a part set off or abstracted from a whole; The Free Dictionary, www.thefreedictionary.com/portion, portion = a part of any whole (Antonym – whole)).

As for pending claims 85-89, 101-105 and 108, Applicants disagree with the Examiner’s statement in the Advisory Action that none of the pending claims include the limitation of a “biologically active metal precipitated with a counter ion of a cationic material.” It is submitted that claims 85-89, 101-105 and 108 all include this limitation.

Independent claim 85 is directed to a sheet comprising activated, carbonized fibrillated fibers having a microbiological interception enhancing agent on a portion of selected ones of the fibrillated fibers. As recited, the microbiological interception enhancing agent comprises a biologically active metal precipitated with a counter ion of a cationic material that is adsorbed on the portion of the selected ones of the activated, carbonized fibrillated fibers.

Independent claim 101 clarifies that the activated, carbonized fibrillated fibers are activated, carbonized fibrillated lyocell fibers having the microbiological interception enhancing agent of a biologically active metal precipitated with a counter ion of a cationic material on a portion thereof.

Applicant submits that the above combination of references, and in particular, Sawan does not disclose or suggest a microbiological interception enhancing agent that

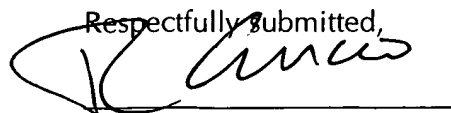
comprises a biologically active metal precipitated with a counter ion of a cationic material, whereby the counter ion of the cationic material is adsorbed on the portion of the selected ones of the carbonized fibrillated fibers. Sawan is limited to teaching a bacteriostatic or bacteriocidal of a metal or metal oxide or metal salt coated on the filter, and as such, does not remedy the deficiencies of Giglia or Arons, alone or in any proper combination thereof.

Applicant also continues to submit that the terms "activated," "carbonized," and "fibrillated" all impart distinct structural characteristics to applicant's resultant claimed sheets. These terms, which the Examiner is interpreting as process steps, are being used to define the resultant product and impart distinctive structural characteristics to the final product. Applicant submits that the terms fibrillated and carbonized describe distinct structural characteristics of the final sheet in that the microbiological interception enhancing agent is provided to such fibers only after they have been fibrillated and carbonized. These limitations impart distinct structural characteristics to the resultant claimed sheet, and are neither disclosed nor contemplated by the cited references, either alone or in any proper combination thereof.

It is for these reasons that applicants submit that the Examiner has not established a *prima facie* case of obviousness over Giglia in view of Arons and Sawan.

Applicants submit that the application is in a condition where allowance of the entire case is proper. Reconsideration and issuance of a notice of allowance are respectfully solicited.

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Respectfully submitted,

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